DOCUMENT RESUME

ED 330 003 CS 507 404

AUTHOR Eaves, Michael
TITLE The Effects of Proxemic Violations as Distractors on Persuasive Message Attempts.
PUB DATE Apr 90
NOTE 38p.; Paper presented at the Annual Meeting of the Southern Speech Communication Association (Charleston, SC, April 5-8, 1990).
PUB TYPE Speeches/Conference Papers (150) -- Reports - Research/Technical (143) -- Tests/Evaluation Instruments (160)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Communication Research; Higher Education; *Information Processing; *Nonverbal Communication; *Personal Space; *Persuasive Discourse; Student Attitudes; Undergraduate Students
IDENTIFIERS *Distraction; Message Responses

ABSTRACT

Presumably, during persuasion, a violation of a subject's expected distance would act as a distraction, increase the likelihood of message acceptance, create fewer counterarguments, and shift the listener's focus from message content to speaker characteristics. Forty-nine undergraduate speech students participated in a study at a major southeastern university. Each subject entered a room where a confederate was already seated and which contained one empty chair placed against a wall. The confederate then invited the subject to "have a seat and make yourself comfortable," thus ensuring that the subject, and not the confederate, would place the empty chair in the optimal space for that subject--presumably at a comfortable distance from the confederate. As the student sat, the confederate read a counterattitudinal script, during the course of which, in half of the situations, the confederate invaded the subject's space moving his or her own chair far enough to reduce the subject's expected distance by one-half. The subject then completed a 19-item questionnaire. Results provided support for the hypothesis that a violation of expected distance would produce higher speaker attributed credibility scores than when there was no violation. (A sample questionnaire, a data table, and a counterattitudinal script are included; 46 references are attached.) (SG)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED330003

The Effects of Proxemic Violations as Distractors on Persuasive Message Attempts

Michael Eaves
Department of Communication
Florida State University

Presented at the 1990 Convention of the SSCA
in the Communication Theory Division
held in Birmingham, AL on April 5-8, 1990
Bostrom Young Scholars Finalist

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Michael Eaves
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
X This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

CS507404

Running head: THE EFFECTS OF PROXEMIC VIOLATIONS

BEST COPY AVAILABLE

Abstract

The author reviews distraction and expected distance theory. Presumably, during persuasion, a violation of a subject's expected distance would act as a distraction, increase the likelihood of message acceptance, create fewer counterarguments and shift the listener's focus from message content to speaker characteristics. There was mixed support for each of the hypotheses.

The Effects of Proxemic Violations as Distractors on Persuasive Message Attempts

Proxemic research offers to be an intriguing inquiry in interpersonal communication. Many of the proxemic studies are useful and have broadened the understanding of individual and group behavior. One related concept of proxemics is personal space. Proxemics and personal space must be explained in detail.

There is no unique definition of proxemics; however, many scholars refer to Edward Hall's definition, "the study of man's transactions as he perceives and uses intimate, personal, social, and public space in various settings while following out-of-awareness dictates of cultural paradigms" (1974, p. 2). More recent studies provide a definition for proxemics that is similar to Hall's definition. For example, a more basic definition of proxemics is the study of how people use the space around them during face-to-face interactions (Ciolek, 1983).

A more original definition of proxemics would be the study of the ways in which territory, distance, and space communicate meanings during interaction. Any definition of proxemics should include territory, distance, and space because most researchers manipulate these variables in proxemic research.

Although one can find several definitions of personal space in recent research, many of these definitions differ only in their wording rather than in their actual meaning. A basic

definition of personal space is the area surrounding a person's body that is claimed as exclusive space (Strube & Werner, 1984). Similarly, Hayduk (1978) defines personal space as the area around an individual into which others cannot intrude without causing some discomfort.

Altman (1975), on the other hand, defines personal space not as an area but as "a mechanism used to regulate interpersonal interaction and to achieve a desired level of privacy" (p. 54). Several researchers use the term "bubble" to help explain personal space. For example, Ciolek (1983) defines it as a bubble surrounding an individual in unfocused interaction. Hayduk (1983) argues that the bubble analogy is weak because when two bubbles are pressed together, they repel one another, unlike personal space where the other's body, not boundary, is repelled.

With all these definitions in mind, a concise and original definition of personal space is the perceived area of one's boundary that protects him or her from intrusion. The term "personal" suggests that personal space serves an individual function, and this function is one of protection.

Another related term that needs to be explained is crowding. Desor (1972) feels there is agreement among many researchers that crowding is an overexposure to social stimuli. If a perception of less space is created, a perception of crowding typically follows. Research suggests that a perception of

crowding can cause discomfort or some degree of arousal (Hayduk, 1983; Eoyang, 1974).

Review of the Distraction Hypothesis

Now that a basic foundation has been laid for understanding proxemic communication, it is necessary to discuss the distraction hypothesis. Basically, the hypothesis states that if a distraction is present when a person is exposed to a persuasive message, then he or she will focus more on the distraction than on the message. The distraction interferes with the subject's subvocal argument against the message. Most studies present a counterattitudinal message, the receiver subvocally argues against the message at a conscious or subconscious level, the distractor interferes with counterargument development and the receiver builds less opposition against the message. According to the distraction hypothesis, a distractor inhibits counterargument ability, reduces resistance to the influence attempt and increases the probability of acceptance of the persuader's message.

Festinger and Maccoby (1964) conducted one of the first studies about the effect of distraction upon persuasion. The distraction hypothesis was supported in their study. Their findings imply that the receiver will shift his or her focus from the message to personality characteristics of the sender. In their experiment, Festinger and Maccoby delivered an anti-fraternity message to fraternity members. The control group was

shown the film and listened to the speech. On the other hand, the manipulated group was shown an irrelevant film about an award-winning painter while only listening to the anti-fraternity message. The manipulated group was exposed to the distraction condition since they were unable to listen to the film's sound but instead listened to the sound of another film. Subjects in the manipulated group, as expected, expressed more opinion change than did the control group because they could not generate as many counterarguments.

Kiesler and Mathog (1968) found the following hypotheses to be supportive of the distraction hypothesis: a) communication effectiveness will be greater when the source is credible rather than not credible, b) communication effectiveness will be greater under conditions of high interference than low interference and c) the extent to which high interference increases communication effectiveness will depend upon the degree of attributed communicator credibility.

Some early criticism originated from these viewpoints about distraction and its effect on persuasive outcomes. McGuire (1966) criticized Festinger and Maccoby's work for ignoring learning theory. McGuire believed that a distractor would interfere with message processing by inhibiting essential comprehension levels. Since the receiver would process or "learn" less, there would be a low probability of accepting the message. Such opposition to the distraction hypothesis is not

shared by all persuasion scholars. Indeed, the soundness of the distraction hypothesis has been successfully tested and verified in a variety of contexts (in Buller, 1986). For example, Shamo and Meador (1969) found that while distraction did reduce the recall of certain elements in the message, the distraction still produced significant subject attitude change towards the message. The study was important for proponents of the distraction hypothesis because it responded to issues that McGuire and other skeptics had previously addressed.

Aside from the questionable component of recall on attitude change, message comprehension level and its effect on attitude is equally disturbing. Research suggests that a significant reduction of message comprehension has to occur before one can feel confident that it has affected attitude change (Insko, Turnbull & Yandell, 1974). The controversial directions which sought to explain distraction and message acceptance provoked many researchers in the late sixties and early seventies to attempt to replicate findings in the Festinger and Maccoby study. Zimbardo, Synder, Thomas, Gold, and Gurwitz (1970) unsuccessfully disproved the distraction hypothesis. While the authors felt that they had disproved earlier conceptual and experimental notions of the distraction hypothesis, several methodological problems (e.g., poor operationalizations of distraction, artificial settings, and biased experimenters) plagued their

reported findings. The study's findings are indeed circumspect and should be interpreted with extreme caution.

While there were early challenges with regard to counterargument theory and the distraction hypothesis, proponents of the distraction hypothesis were able to rebut these questions. For instance, Osterhouse and Brock (1970) found that under the high-distraction condition there was a tendency toward higher communication acceptance scores. On the other hand, under the no-distraction condition, communication acceptance scores tended to be lower since counterargument was still at a high rate. The study also supported earlier findings that recall was generally unrelated to communication acceptance.

Baron, Baron, and Miller (1973) provided additional support to the distraction hypothesis. These researchers noted one component in the Festinger and Maccoby study that had been ignored by many opponents: "Since Festinger and Maccoby (1964, p.360) recognized that distraction could only enhance persuasion if it did not interfere with comprehension of the persuasive message, these disconfirmations may not be particularly troublesome" (Baron, Baron, and Miller, 1973, p.311). Much of the criticism posed is directed at message comprehension, which is not a contestable point to proponents of the distraction hypothesis due to its irrelevant nature.

Numerous attempts were made to disprove the distraction hypothesis. Several studies failed to replicate the findings

discovered in the Festinger and Maccoby (1964) study. Breitrose, 1966; Gardner, 1966; and Vohs & Garrett, 1968 each employed uninteresting messages that produced low-involved university subjects. For example, in the Breitrose study, topics included elements of New Zealand politics and effects of wearing eyeglasses. Other studies (Miller & Baron, 1973; Miller & Levy, 1967) that have failed to replicate the distraction hypothesis used settings where the distraction served as an inhibitor to message comprehension, an idea that proponents of the distraction hypothesis do not support (in Baron, et al., 1973). These are just a few of the reasons that may help explain why the studies were unsuccessful in disproving the hypothesis.

Regan and Cheng (1973) further supported the effect of distraction upon attitude change. Their research casted doubt on the importance of message reception and attitude change by citing Rule and Rehill (1970) to justify such a position. Later findings lend similar support to the distraction hypothesis (Keating & Brock, 1974; Brandt, 1979; Lammers & Becker, 1980; Stacks & Burgoon, 1981).

Review of Expected Distance Theory

Now that the distraction hypothesis has been reviewed, expected distance theory should be examined. A person usually maintains an "optimum level" of distance between others during interaction. Expected distance serves as a precondition for the person, in that he or she expects that this variable will not be

affected in the interaction (Burgoon & Jones, 1976). One contention is that a violation of expected distance will serve as a distraction during the delivery of a persuasive message. When the expected distance is threatened, the violation has the potential to become a distractor.

The distractor should positively affect the invadee's response to the message, either at a conscious or a sub-conscious level. The positive reaction to the message is partially explained by the ineffectiveness of the invadee's counter-argument production (Stacks & Burgoon, 1981).

Some scholars have indicated that when one deviates from the normal or expected behavior during a message exchange, then the focus becomes the deviation instead of the message (Langer, 1978; Langer & Imber, 1980). Research suggests that violations of expected distances will produce a shift from the speaker's message to the speaker's personality characteristics which may include credibility (Burgoon & Jones, 1976; Hayduk, 1978, 1983). Credibility has been related to numerous personal space preferences.

Rationale and Hypotheses

Several areas are of immediate concern. First, factors affecting personal space preferences need to be further examined. Earlier studies have argued that examining only distance deviations is a myopic approach to the study of persuasion (Stacks & Burgoon, 1981). Second, while there have

been studies which have examined distraction, the author found no study that examined distraction from proxemic violations. Third, conditions in the present investigation should be more realistic than conditions in other studies because the subject is presumably unaware of the "meaning" of the distance violation during the delivery of the message. Based on the above rationale, the following hypotheses were formulated:

Hypothesis 1: A violation of expected distance will serve as a distractor in the persuasive context.

Hypothesis 2: A violation of expected distance will increase the likelihood of an invadee's acceptance of the message.

Hypothesis 3: A violation of expected distance will reduce the number of an invadee's arguments generated against the message.

Hypothesis 4: A violation of expected distance will produce higher speaker-attributed credibility scores than when there is no violation.

METHOD AND PROCEDURE

Subjects

There were forty-nine undergraduate students (twenty-one male and twenty-eight female) selected from introductory speech courses at a major southeastern university. The subject's average age was 20.7 years old and ranged from 18-29 years old. Of the forty-nine subjects, 18.4% were freshmen, 14.2% were sophomores, 49.0% were juniors, and 18.4% were seniors. Subjects

were able to substitute an assignment in their speech class for their participation in the study.

Experimental Design

Hayduk (1983) distinguishes between two classes of personal space research approaches: a) projective measures which include the manipulation of silhouettes or paper and pencil and b) real-life measures which include the manipulation of chair placement, stop-distance, and unobtrusive observation. Projective and real-life measures should be used with caution as both have produced inconsistent results. Results obtained from projective measures tend to be more problematic, however. When a projective measure is used, a subject may not be able to accurately predict his or her actual personal space for the given situation (Hayduk, 1983). A real-life measure was selected for the present study. While a self-report measure was used in the study, the subjects did not imagine a situation. Instead, the subjects responded to a series of questions that pertained to the interaction which had just occurred. While a self-report measure may share methodological weaknesses with a silhouette placement measure, self-reported data can be used to help better predict behavior and improve construct development (Norton, 1980). Researchers have examined personal space and have found good reliability when using self report (Webb, Worchel, & Brown, 1986).

Unlike projective measures, real-life measures place participants in their natural setting. Real-life measures use

"real" people in "real" situations and do not rely on imaginary people or situations created by subjects (Hayduk, 1978). One real-life measure used in the experiment was chair placement. When the chair placement measure was used, subjects were asked by a confederate to "have a seat and make yourself comfortable." A chair faced the left wall of the room in which the subject entered. This was done so the subject, as opposed to the confederate, would carefully place the chair in the optimal space. Presumably, the subject would place the chair at a comfortable distance from the chair where the confederate was already seated. One overwhelming advantage of chair placement measures have been the consistent findings reported (Daniell & Lewis, 1972; Hayduk, 1978). Other real-life measures such as observational and stop-distance approaches were not chosen because they were either inappropriate or problematic such as those used in an earlier study (Baum, Riess & O'Hara, 1974).

Since the subject decided his or her expected distance, a reduction of space between the experimenter and the subject by one-half was deemed to be sufficient to create a violation of the subject's expected distance (e.g., if the subject chose a conversation distance of four feet, the experimenter invaded approximately two feet into the subject's space). Previously assigning space between the experimenter and the subject would not only deny studying "expected" distance which is based on individual preference, but would also imply using a "normative"

conversational distance which has produced inconsistent findings in the literature (Rosenfeld, 1965; Hall, 1966; Sommer, 1969). The preferred method was to allow the subject to decide his or her own "spatial preference" in order that the original theories presented earlier could be tested. Such methods have been used in previous studies (Altman, 1975; Hayduk, 1978; Ciolek, 1983; Burgoon & Hale, 1988).

In the current study, each subject filled out a 19-item questionnaire in order to collect data concerning the four hypotheses (see Appendix A for the questionnaire). Items (1-3) in the questionnaire asked the subject's sex, age, and classification. Item (4), a question about the subject's major in school, and item (9), a question about how subjects felt during experiments, were both irrelevant questions. Items (5-7) in the questionnaire sought to find out the level of message acceptance.

The questions were adopted from a message acceptance scale created by Osgood, Suci, and Tannenbaum (1957). Scales such as good-bad, optimistic-pessimistic, and strongly agree-strongly disagree were be used to measure acceptance. Scales such as kind-cruel, strong-weak, and beautiful-ugly will not be used because they would prove to be less evaluative as the concept being measured varies with so much degree. In addition, irrelevant scales were used in the questionnaire to hide the genuine purpose of the measurement from the subject.

Items (8 and 10-13) in the questionnaire were manipulation checks on the subject's perceived degree of distraction. Stacks and Burgoon (1981) used the measure in a previous study. The measurement scale consists of five seven-point semantic differential items bound by bipolar adjectives which include the following: "calm-anxious," "comfortable-uncomfortable," distracted-not distracted," "relaxed-tense," and "attentive-inattentive." The average correlation for the distraction items reported in their study was 0.86.

Items (14-19) in the questionnaire measured attributed speaker credibility. In an article authored by McCroskey, Jensen, and Valencia (1973), speaker credibility was measured by the subject's ratings along five dimensions using seven-point semantic differentials which included competence, character, sociability, composure and dynamism. Coefficient alpha reliabilities for the five subscales have been reported in more recent research as: .83, .78, .84, .83 and .79, respectively (Burgoon & Hale, 1988). Several dimensions were used in the current investigation.

Since there has been almost unanimous student opposition to a tuition increase (Brock & Blackwood, 1962; Brock & Becker, 1965; Brock & Becker, 1966; Brock, 1967; Osterhouse & Brock, 1970), a pre-attitudinal assessment towards the topic was unnecessary. The counterattitudinal script was entitled, "Student Tuition Needs to be Increased." Elements of the script

(partially adapted from Osterhouse and Brock in 1970) included: 1) a sharp increase in construction costs, 2) inadequate student parking facilities, 3) loss of research grants due to inadequate research facilities, 4) loss of faculty due to inadequate salaries, 5) the poor university facilities such as dorms and dining halls and 6) students paying too negligible a share of their total educational costs (see Appendix B for the script that was used).

The tuition topic was selected because subjects would have a good opportunity to generate arguments against a topic that generates opposition. The students were given three minutes to write down their arguments. The criteria used to meet "counterattitudinal persuasion," adopted from Osterhouse and Brock in 1970, includes the following elements: 1) the message must be discrepant enough so that counterarguing is likely to occur [originally found in Brock (1967)], 2) the distracting task must interfere with counterargumentation without, at the same time, affecting the reproducibility of the message, 3) subjects must be distracted in isolation, 4) distraction tasks which require vocal activity may especially facilitate the effect of distraction upon communication acceptance [other studies have shown that proxemic violations (distraction tasks which rely on visual activity) have an effect on communication acceptance (Stacks & Burgoon, 1981; Buller, 1986; Burgoon & Hale, 1988)] and

5) perceived distraction and counterargument inhibition should be verified by measurement.

Experimental Procedure

Research participation forms were disseminated to introductory speech communication students. The purpose of the form was to let students know where to go, what times were available and what credit would be awarded for their participation in the study.

After first arriving for participation in the study, the subject was asked to review and sign a consent form. An assistant reviewed the consent form with the subject(s). After answering any questions, the assistant collected the form(s).

The subject was then escorted by the assistant to a nearby room where the confederate was already seated. The confederate asked the subject to, "have a seat and make yourself comfortable" (the experimenter pointed at a chair that rested near the door). This procedure was selected because the subject defined his or her expected distance during the interaction period.

After the subject placed his or her chair at the desired location, the confederate began to read the counterattitudinal script to the subject. The script took approximately six minutes to read (length of the script was adopted from an earlier study conducted by Osterhouse and Brock, 1970). In half of the situations, the confederate invaded the distance of the subject by one-half. The confederate maintained the original distance

set by the subject in the other half of the situations. During the invasion situation, the confederate consistently violated the distance of the subject at the beginning of the delivery of the third point in the script. After hearing the message, the subject was asked to generate arguments against the message. Next, the subject was asked to use the opposition form designed by Osterhouse and Brock (1970) to write down his or her counterarguments. Each subject was given three minutes to write down his or her arguments. The form was collected by the confederate and the subject was excused. The confederate indicated on the form the situation-type for each subject (either invasion or no-invasion).

Next, each subject was escorted to a third room where he or she filled out a questionnaire. The author distributed and collected all form(s). Questions were answered regarding any confusion about what to do. After completing the questionnaire, the author collected the form and the subject was debriefed concerning his or her involvement, was informed about the independent and dependent variables, was told not to tell anyone about the procedures that took place and was thanked for participating in the study.

Three graduate students were selected and trained to code the opposition forms. In addition, each coder had previous training and experience in argumentation. Each coder counted the number of arguments which appeared on the form. The training

procedures were based on principles cited in an earlier study by Brock in 1967. A favorable coefficient alpha reliability (alpha=.859) was discovered for the three coders who counted the number of arguments on the opposition forms.

RESULTS

For each of the four hypotheses, t-tests were executed to determine significance levels (see Table 1). Hypothesis 1, a violation of expected distance will serve as a distractor in the persuasive context, received mixed support. Item (12) in the questionnaire yielded the most favorable results toward supporting the existence of a distractor; however, p levels were non-significant. Item (13) also provided confirming results with hypothesis 1, yet non-significant. Items (8 and 10-12) either produced no difference or contradictory results.

Hypothesis 2, a violation of expected distance will increase the likelihood of an invadee's acceptance of the message, also received mixed support. The two questions in items (5 and 7) in the questionnaire yielded the results in the wrong direction, yet item (6) yielded the best results toward supporting the acceptance of the message. This is an interesting finding because item (6) implies an attitudinal response to the message, while items (5 and 7) reply a "yes" or "no" response to the message. Perhaps, students were willing to be open-minded about the issue but when asked to indicate their preference they were forced to select the "no" response.

Hypothesis 3, a violation of expected distance will reduce the number of an invadee's arguments generated against the message, was not supported. For coder 2, more arguments were produced by the control group than for the manipulated group. Since p levels indicated that coder 2's rating was significant, a collapsed t-test was run for all three coders producing insignificant p levels. While coder 2 did show that hypothesis 3 was untrue, the combination of all three coders disproved such a claim. Coders 1 and 3 were not willing to say that subjects who were distracted produced more arguments, only that there was no significant difference between the two groups as demonstrated in Table 1.

Hypothesis 4, a violation of expected distance will produce higher speaker-attributed credibility scores than when there is no violation, received the most support in the study. In the measures for speaker-attributed credibility found in items (14-19) in the questionnaire, only two of the six measures did not support hypothesis 4. Neither of the two contradictory findings were statistically significant. Item (16) provided the best support for hypothesis 4. The measure used "sociability" to determine speaker-attributed credibility from subjects. The measure has been documented in earlier research (McCroskey, Jensen, and Valencia, 1973). For Item (16), subjects attributed speakers with more credibility when their expected distance was violated than when no invasion occurred. The reported p level

for item (16) was less than .01. In addition to this significant finding, items (15, 17 and 19) provide a pattern of results in the direction of supporting hypothesis 4. With the exception of item (15), the items were close to significance. Possibly, these scales reflect an accurate account of how the subject viewed speaker credibility in its truest sense.

DISCUSSION

General Comments About the Study

First, the study took place in a "quasi-natural" environment. Perhaps future study could examine proxemic behavior in its most natural setting.

Second, another topic choice would be interesting. Today, maybe students have changed their views about education and costs.

Third, in addition to the two conditions of invasion and no-invasion which were used, a "flight" condition would be interesting. In other words, the subject pool could be broken down into three conditions: no-invasion, invasion and flight. In the flight condition the confederate would simply withdraw and move his chair backward instead of forward. There are a few major issues that need to be discussed at this point.

External and Internal Validity

The issue of external and internal validity are important in this study, as in any social science experiment. There should only be minimal threats to external validity. The university has

many students with a large distribution of interests, goals, and career choices. Additionally, Campbell and Stanley (1966) warn that "those who complain of the low external validity of experiments may be expecting too much from each experiment. They suggested that such critics adopt a somewhat longer time perspective and that experimenters explore the generality of findings by conceptual replications" (quoted in Jones, 1985, p.320).

The experiment was internally valid for several reasons. First, the issue of selection was important. Any researcher should make sure that his studied groups will be considered "equal" when beginning the investigation. Furthermore, maturation, history, and instrumentation may all interact with the issue of selection. Second, much of the procedures were based on earlier studies. Third, through rigorous training, the confederate was ready for all script presentations.

Future Directions for Research

Several areas of persuasion and personal space research need immediate attention. First, further replication and modification of the procedures and concepts of this study, especially regarding the operationalization of "expected distance violation", would be a worthwhile attempt for the social scientist. It may be interesting to see what differences are found between invasion and flight when violating the subject's expected distance.

Second, it may be interesting to sample both college and non-college persons for a study in the future. Using a sample composed of a variety of groups could be beneficial when making generalizations about the results.

Third, it would be interesting to discover possible differences in attitude level based on a counterattitudinal message which is not presented in this study. For example, using a tax increase or a food cost increase message could be interesting.

Fourth, there is a need for a comprehensive model that centers on the variables which are to be studied. Hopefully, this model would provide a good platform with which to analyze the differences between idiosyncratic and normative behavior regarding personal space choices which are made during acts of persuasion.

References

Altman, I. (1975). The environment and social behavior: Privacy, personal space, territory, crowding. Montery, CA: Brooks/Cole.

Baron, R. S., Baron, P. H., & Miller, N. (1973). The relation between distraction and persuasion. Psychological Bulletin, 80, 310-323.

Baum, A., Riess, M., & O'Hara, J. (1974). Architectural variants of reaction to spatial invasion. Environment and Behavior, 6, 91-100.

Brandt, D. R. (1979). Listener propensity to counterargue, distraction, and resistance to persuasion. Central States Speech Journal, 30, 321-331.

Breitrose, H. S. (1966). The effect of distraction in attenuating counterarguments. Unpublished doctoral dissertation, Stanford University. In Baron, R. S., Baron, P. H., & Miller, N. (1973). The relation between distraction and persuasion. Psychological Bulletin, 80, 310-323.

Brock, T. C. (1967). Communication discrepancy and intent to persuade as determinants of counterargument production. Journal of Experimental Social Psychology, 3, 296-309.

Brock, T. C., & Becker, L. A. (1965). Ineffectiveness of "overheard" counterpropaganda. Journal of Personality and Social Psychology, 2(5), 654-660.

Brock, T. C., & Becker, L. A. (1966). "Debriefing" and susceptibility to subsequent experimental manipulations. Journal of Experimental Social Psychology, 2, 314-323.

Brock, T. C., & Blackwood, J. E. (1962). Dissonance reduction, social comparison, and modification of others' opinions. Journal of Abnormal and Social Psychology, 65(5), 319-324.

Buller, D. B. (1986). Distraction during persuasive communication: A meta-analytic review. Communication Monographs, 53, 91-114.

Burgoon, J. K., Hale, J. L. (1988). Nonverbal expectancy violations: Model elaboration and application to immediacy behaviors. Communication Monographs, 55, 58-79.

Burgoon, J. W., & Jones, S. B. (1976). Toward a theory of personal space expectations and their violation. Human Communication Research, 2, 1131-1146.

Ciolek, T. M. (1983). The proxemics lexicon: A first approximation. Journal of Nonverbal Behavior, 8, 55-79.

Daniell, R. J., & Lewis, P. (1972). Stability of eye contact and physical distance across a series of structured interviews. Journal of Consulting and Clinical Psychology, 39, 172.

Desor, J. A. (1972). Toward a psychological theory of crowding. Journal of Personality and Social Psychology, 21, 79-83.

Eoyang, C. K. (1974). Effects of group size and privacy in residential crowding. Journal of Personality and Social Psychology, 30(3), 389-392.

Festinger, L., & Maccoby, N. (1964). On resistance to persuasive communication. Journal of Abnormal and Social Psychology, 68, 359-366.

Gardner, D. M. (1966). The effect of divided attention on attitude change induced by a marketing communication. In R. M. Haus (Ed). Science, technology, and marketing, 532-540, Chicago: American Marketing Association.

Hall, E. T. (1966). The hidden dimension. New York: Doubleday.

Hall, E. T. (1974). Handbook for proxemic research. Washington, DC: Society for the Anthropology of Visual Communication.

Hayduk, L. A. (1978). Personal space: An evaluative and orienting overview. Psychological Bulletin, 85, 117-134.

Hayduk, L. A. (1983). Personal space: Where we now stand. Psychological Bulletin, 94, 293-335.

Insko, C. A., Turnbull, W., & Yandell, B. (1974). Facilitative and inhibiting effects of distraction on attitude change. Sociometry, 37, 508-528.

Jones, R. A. (1985). Research methods in the social and behavioral sciences. Sunderland, Mass.: Sinauer Associates.

Keating, J. P., & Brock, T. C. (1974). Acceptance of persuasion and the inhibition of counterargumentation under various distraction tasks. Journal of Experimental Social Psychology, 10, 301-309.

Kiesler, S. B., & Mathog, R. B. (1968). Distraction hypothesis in attitude change: Effects of effectiveness. Psychological Reports, 23, 1123-1133.

Lammers, H. B., & Becker, L. A. (1980). Distraction: Effects on the perceived extremity of a communication and on cognitive responses. Personality and Social Psychology Bulletin, 6, 261-266.

Langer, E. (1978). Rethinking the role of thought in social interaction. In J. H. Harvey, W. J. Ickes & R. F. Kidd (Eds.), New directions in attribution research, (Vol.2, pp. 35-58). Hillsdale, N. J.: Lawrence Erlbaum.

Langer, E. J., & Imber, L. (1980). Role of mindlessness in the perception of deviance. Journal of Personality and Social Psychology, 39, 360-367.

McCroskey, J. C., Jensen, T., & Valencia, C. (1973). Paper presented at the annual meeting of the International Communication Association, Montreal. In Burgoon, J. K., & Hale, J. L. (1988). Nonverbal expectancy violations: Model elaboration and application to immediacy behaviors. Communication Monographs, 55, 58-79.

McGuire, W. J. (1966). Attitudes and opinions. Annual Review of Psychology, 17, 475-514.

Miller, N., & Baron, R. S. (1973). On measuring counterarguing. Journal of the Theory of Social Behavior, 3, 101-118.

Miller, N., & Levy, B. H. (1967). Defaming and agreeing with the communicator as a function of emotional arousal, communication extremity, and evaluative set. Sociometry, 30, 158-175.

Norton, R. W. (1980). The illusion of systematic distortion. Human Communication Research, 7(1), 88-96.

Osgood, C. E., Suci, G. J., & Tannenbaum, P. H. (1957). The measurement of meaning. Urbana, Illinois: University of Illinois Press.

Osterhouse, R. A., & Brock, T. C. (1970). Distraction increases yielding to propaganda by inhibiting counterarguing. Journal of Personality and Social Psychology, 15, 344-358.

Regan, D. T., & Cheng, J. B. (1973). Distraction and attitude change: A resolution. Journal of Experimental Social Psychology, 9, 138-147.

Rosenfeld, H. M. (1965). Effect of an approval-seeking induction on interpersonal proximity. Psychological Reports, 17, 120-122.

Rule, B. G., & Rehill, D. (1970). Distraction and self-esteem effects on attitude change. Journal of Personality and Social Psychology, 15, 359-365.

Shamo, G. W., & Meador, L. M. (1969). The effect of visual distraction upon recall and attitude change. Journal of Communication, 19, 157-162.

Sommer, R. (1969). Personal space: The behavioral basis of design. Englewood Cliffs, N. J.: Prentice-Hall.

Stacks, D. W., & Burgoon, J. K. (1981). The role of nonverbal behaviors as distractors in resistance to persuasion in interpersonal contexts. Central States Speech Journal, 32, 61-73.

Strube, M. J., & Werner, C. (1984). Personal space claims as a function of interpersonal threat: The mediating role of need for control. Journal of Nonverbal Behavior, 8, 195-209.

Vohs, J. L., & Garrett, R. L. (1968). Resistance to persuasion: An integrative framework. Public Opinion Quarterly, 32, 445-452.

Webb, W. M., Worchel, S., & Brown, E. H. (1986). The influence of control on self-attributions. Social Psychology Quarterly, 49, 260-267.

Zimbardo, P. G., Snyder, M., Thomas, J., Gold, A., & Gurwitz, S. (1970). Modifying the impact of persuasive communications with external distraction. Journal of Personality and Social Psychology, 16, 669-680.

Appendix A

Subject's Questionnaire

Fill out the following questions to the best of your ability. Ask the assistant if you do not understand a question.

1. Sex: _____male _____female

2. Age: _____

3. Classification (freshman____; sophomore____; junior____ senior____)

4. What is your major?_____

Circle the number on the following scales which corresponds to your attitude or feeling about the statement.

5. The ideas in the message I heard were

_____

1 2 3 4 5 6 7

good bad

6. The script that I listened to was

_____

1 2 3 4 5 6 7

optimistic pessimistic

7. Tuition should be increased at U.G.A.

_____

1 2 3 4 5 6 7

strongly agree strongly disagree

8. While the message was read, I was

1	2	3	4	5	6	7
calm						anxious

9. Participation in experiments makes me feel

1	2	3	4	5	6	7
good						bad

10. The message on tuition increase made me

1	2	3	4	5	6	7
comfortable						uncomfortable

11. The message caused me to feel

1	2	3	4	5	6	7
relaxed						tense

12. During the message, I felt that I was

1	2	3	4	5	6	7
distracted						not distracted

13. When the message was presented, I feel that I was

_____

1 2 3 4 5 6 7

attentive inattentive

14. I perceived the speaker to be

_____

1 2 3 4 5 6 7

competent incompetent

15. I perceived the speaker to have

_____

1 2 3 4 5 6 7

trustworthy untrustworthy

16. I thought that the presenter was

_____

1 2 3 4 5 6 7

sociable unsociable

17. I perceived the speaker to be

_____

1 2 3 4 5 6 7

composed not composed

18. I thought that the presenter was

_____

1 2 3 4 5 6 7

dynamic not dynamic

19. I perceived the speaker to be

_____

1 2 3 4 5 6 7

knowledgeable unknowledgeable

You are now finished with the questionnaire. Raise your hand and your form will be collected by an assistant.

Appendix B

Script-Student Tuition Needs to be Increased

There are times when the government and the educational system need our help. It is now time for such a response from the students of this university; a tuition increase of $25 per credit. There are several reasons that tuition needs to be increased.

First, there has been an explosion of construction jobs here at the university, the bio-science laboratory to name one. Estimated costs for the bio-science lab are $35 million. Other projects are either underway or are planned to begin soon. These projects are estimated to cost $20 million.

Second, student parking facilities are inadequate for students' needs. Finally, we need to build more parking decks close to campus. Parking on this campus is a major problem for the faculty, especially students. Most students have to park in the undergraduate parking lot which is a good walk from all classes at the university. For this reason, students have to take the bus after parking their car. One may ask, "Why even drive to school when you end up taking the bus anyway?" Moreover, many students have complained about being late to class even though they arrived at the undergraduate parking lot in plenty of time before class began.

Third, several research grants have been lost at this university due to poor research facilities, especially in non-

science areas like music, foreign languages, art, and English. This includes badly needed dollars for the library where books are missing and need to be replaced.

Fourth, several faculty members have left the university due to unreasonably low salaries. In addition, other interested applicants have gone elsewhere for work when they discovered the low starting salaries. The average starting salary at this university is unreasonably low.

Fifth, there needs to be an upgrade of the university facilities. Plans can be drawn up to restore and renovate the dormitories, married housing, and university apartments. Additionally, there can be room for improvement in the university dining halls by providing better food, service and dining rooms for the students.

Last, students are not paying their share for the costs of this educational program. The average cost for each student at this university is alarming; whereas, the average student pays the university only a minimal fee per quarter. Also realize that some students do not pay any tuition due to grants, aid, scholarships, and work study programs.

Table 1

T-Test Results of the Experiment: Mean, StDev, Significance

Dependent Variable items*	Violation Mean/StDev	No Violation Mean/StDev	Significance t value/p value
distraction			
item 8	2.60/1.53	3.17/1.49	-1.31/.098
item 10	4.00/1.35	4.00/1.14	0.00/.500
item 11	4.00/1.35	4.21/1.32	-0.55/.294
item 12	4.84/2.12	5.13/1.62	-0.53/.300
item 13	2.32/1.31	2.25/1.13	0.20/.421
message acceptance			
item 5	3.72/1.46	3.13/1.26	1.52/.067
item 6	4.12/1.45	4.21/1.47	-0.21/.417
item 7	4.72/1.37	4.42/1.47	0.75/.229

*=Item no. on the questionnaire.

Table 1 (cont.)

T-Test Results of the Experiment: Mean, StDev, Significance

Dependent Variable items* coders**	Violation Mean/StDev	No Violation Mean/StDev	Significance t Value/p value
# of arguments			
coder 1	3.88/1.83	3.75/1.23	0.29/.387
coder 2	4.52/1.74	3.71/1.30	1.85/.036
coder 3	4.40/1.66	4.00/1.56	0.87/.195
speaker credibility			
item 14	2.08/1.32	1.83/.917	0.76/.227
item 15	2.36/1.19	2.38/1.06	-0.05/.482
item 16	2.00/.913	2.79/1.22	-2.59/.0065
item 17	1.80/.764	2.08/.974	-1.14/.131
item 18	3.76/.926	3.58/1.10	0.61/.273
item 19	2.52/1.19	2.83/.868	-1.05/.151

*=Item no. on the questionnaire.

**=Coder no. who counted number of arguments on the opposition forms.